

In the claims:

Please substitute the following full listing of claims for the claims as originally filed or most recently amended.

1. (Original) A digital filter for applying one of a plurality of correction factors to first digital data in accordance with a difference in value between said first digital data and second digital data, said filter comprising

means for determining an increase in value of a correction value according to said difference within a range above a threshold, and

means for summing said increase in value of said correction value with a maximum increase in said correction value for each lower range of difference values.

2. (Original) A digital filter as recited in claim 1, wherein said rang and said lower ranges are defined by threshold difference values.

3. (Original) A digital filter as recited in claim 1, wherein said first and second digital data are image luminance values.

4. (Original) A digital filter as recited in claim 3, wherein said image luminance values are luminance values of adjacent pixels in a direction orthogonal to a raster line.

5. (Original) A digital filter as recited in claim 1, wherein said second digital data is truncated by a least significant bit.

6. (Original) A digital filter as recited in claim 1, wherein a range of possible values of said first and second data is clipped, providing disallowed values of said first and second digital data.

7. (Original) A digital filter as recited in claim 6, wherein said second digital data is truncated by at least one least significant bit.

8. (Original) A digital filter as recited in claim 6, further including

means for storing said first digital data and accessing values thereof as said second digital data.

9. (Original) A digital filter as recited in claim 8, further including

means for compressing said first digital data by encoding a run length of sequential identical values in accordance with said disallowed values.

10. (Original) A digital filter as recited in claim 7, further including

means for storing said first digital data and accessing values thereof as said second digital data.

11. (Original) A digital filter as recited in claim 10, further including

means for compressing said first digital data by encoding a run length of sequential identical values in said at least one bit truncated from said second digital data.

12. (Original) A digital filter as recited in claim 11, further including

means for compressing said first digital data by encoding a run length of sequential identical values in accordance with said disallowed values.

13. (Original) A digital filter as recited in claim 12, wherein one of said disallowed values is a flag indicating compression in accordance with another of said disallowed values.

14. (Original) A digital filter as recited in claim 4, wherein said first digital data represents one of a plurality of image planes and further includes at least one said correction factor associated with a region of an image in said image plane.

*AB  
CD*

15. (Original) A data processor including  
means for clipping respective digital values to  
provide disallowed values of digital data,  
means for truncating said digital values by at  
least one least significant bit forming truncated  
digital values, and  
means for compressing said digital values by  
encoding a run length of sequential identical truncated  
digital values with said disallowed values of said  
digital data and at least one bit replacing said at  
least one least significant bit.

16. (Original) A data processor as recited in claim 15, wherein at least one said disallowed value is a flag indicating encoding of a run length as another  
disallowed value.

17. (Currently Amended) A method of processing digital data including steps of  
truncating at least one least significant bit of  
said clipped digital signal values forming truncated  
digital signal values, and  
filtering respective values of said digital data  
with using corresponding ones of said truncated digital  
signal values to determine a correction factor in  
accordance with a filter transfer function.

18. (Original) A method as recited in claim 17, wherein said filtering step is performed with each of two of said truncated digital signal values.

19. (Original) A method as recited in claim 18, including the further steps of

clipping digital signal values to a range forming clipped digital signal values and disallowed values, and

compressing said truncated digital signal values in accordance with run length codes using said disallowed values and said at least one least significant bit.

*AB  
OD-1*

20. (Original) A method as recited in claim 18, including the further step of deriving one of said two signal values by storing another of said truncated digital signal values in a buffer for the duration of a scan line.

~~18.~~ 21. (Original - Revised claim number) A method as recited in claim 17, including the further step of storing said truncated digital signal values in a form encoded with said disallowed values.

~~19.~~ 22. (Original - Revised claim number) A method as recited in claim 17, wherein said filtering step includes

summing an increase in value of a correction factor in a range of difference values between a value of said digital data and a corresponding truncated digital signal value with a maximum increase in said correction value for each lower range of difference values.

20. 23. (Original - Revised claim number) A method as recited in claim 18, wherein said filtering step includes

summing an increase in value of a correction factor in a range of difference values between a value of said digital data and a corresponding truncated digital signal value with a maximum increase in said correction value for each lower range of difference values.